In the Claims:

1. (Currently Amended) A method of preventing, inhibiting ~~and/~~or reversing ~~proliferation, colonization, differentiation and/or development of abnormally proliferating cells~~ in a mammalian subject, a process associated with abnormally proliferating cells selected from the group consisting of proliferation, development, differentiation, transformation, tumorigenesis, tumor growth, colonization and angiogenesis, the method comprising the step of administering to the subject a therapeutically effective amount of a ribonuclease of the T2 family, thereby preventing, inhibiting or reversing in a mammalian subject said process associated with abnormally proliferating cells.

2. (Original) The method of claim 1, wherein said ribonuclease of the T2 family substantially lacks ribonucleolytic activity.

3. (Currently Amended) The method of claim 1, wherein the abnormally proliferating cells are cancerous cells and/or angiogenic cells.

4. (Currently Amended) The method of claim 1, wherein the abnormally proliferating cells are ~~cell~~ associated with a proliferative disorder or disease selected from the group consisting of papilloma, blastoglioma, Kaposi's sarcoma, melanoma, lung cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, astrocytoma, head cancer, neck cancer, bladder cancer, breast cancer, colorectal cancer, thyroid cancer, pancreatic cancer, gastric cancer, hepatocellular carcinoma, leukemia, lymphoma, Hodgkin's disease, Burkitt's disease, arthritis, rheumatoid arthritis, diabetic retinopathy, angiogenesis, restenosis, in-stent restenosis and vascular graft restenosis.

5. (Currently Amended) The method of claim 1, wherein said step of administering to the subject said therapeutically effective amount of said RNase of the T2 family is effected by an administration mode selected from the group consisting of oral administration, intravenous administration, subcutaneous administration, systemic administration, topical administration, transmucosal administration,

parenteral administration, rectal administration and ~~by~~ inhalation.

6. (Original) The method of claim 1, wherein said ribonuclease of the T2 family is RNase B1.

7. (Currently Amended) The method of claim 1, wherein said ribonuclease of the ribonuclease T2 family is selected from the group consisting of RNase T2, RNase Rh, RNase M, RNase Trv, RNase Irp, RNase Le2, RNase Phyb, RNase LE, RNase MC, RNase CL1, RNase Bsp1, RNase RCL2, RNase Dm, RNase Oy, RNase I, RNase 6PL and RNase Tp.

8. (Withdrawn) A method of preventing, inhibiting and/or reversing proliferation, colonization, differentiation and/or development of abnormally proliferating cells in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a polynucleotide encoding and capable of expressing in vivo a recombinant ribonuclease of the T2 family.

9. (Withdrawn) The method of claim 8, wherein said ribonuclease of the T2 family substantially lacks ribonucleolytic activity.

10. (Withdrawn) The method of claim 8, wherein the abnormally proliferating cells are cancerous cell.

11. (Withdrawn) The method of claim 8, wherein the abnormally proliferating cells are cells associated with a proliferative disorder or disease selected from the group consisting of papilloma, blastoglioma, Kaposi's sarcoma, melanoma, lung cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, astrocytoma, head cancer, neck cancer, bladder cancer, breast cancer, lung cancer, colorectal cancer, thyroid cancer, pancreatic cancer, gastric cancer, hepatocellular carcinoma, leukemia, lymphoma, Hodgkin's disease, Burkitt's disease, arthritis, rheumatoid arthritis, diabetic retinopathy, angiogenesis, restenosis, in-stent restenosis and vascular graft restenosis.

12. (Withdrawn) The method of claim 8, wherein said step of administering to the subject said therapeutically effective amount of a polynucleotide encoding and capable of expressing in vivo said recombinant ribonuclease of the T2 family is effected by an administration mode selected from the group consisting of oral administration, topical administration, transmucosal administration, parenteral administration and by inhalation.

13. (Withdrawn) The method of claim 8, wherein said ribonuclease T2 family is RNase B1.

14. (Withdrawn) The method of claim 8, wherein said ribonuclease of the T2 family is selected from the group consisting of RNase T2, RNase Rh, RNase M, RNase Trv, RNase Irp, RNase Le2, RNase Phyb, RNase LE, RNase MC, RNase CL1, RNase Bsp1, RNase RCL2, RNase Dm, RNase Oy and RNase Tp.

15. (Currently Amended) A pharmaceutical composition comprising, as an active ingredient, a substantially purified ribonuclease of the T2 family being derived from Aspergillus niger, and/or being substantially deglycosylated, and a pharmaceutically acceptable carrier.

16. (Original) The pharmaceutical composition of claim 15, wherein said ribonuclease of the T2 family substantially lacks ribonucleolytic activity.

17-18. (Cancelled)

19. (Original) The pharmaceutical composition of claim 15, wherein said ribonuclease of the T2 family is RNase B1.

20. (Cancelled)

21. (Withdrawn) A pharmaceutical composition comprising, as an active ingredient, a polynucleotide encoding and capable of expressing in vivo a recombinant ribonuclease of the T2 family, and a pharmaceutically acceptable carrier.

22. (Withdrawn) The pharmaceutical composition of claim 21, wherein said ribonuclease of the T2 family substantially lacks ribonucleolytic activity.

23. (Withdrawn) The pharmaceutical composition of claim 21, wherein the abnormally proliferating cells are cancerous cells.

24. (Withdrawn) The pharmaceutical composition of claim 21, wherein the abnormally proliferating cells are cells associated with a proliferative disorder or disease selected from the group consisting of papilloma, blastoglioma, Kaposi's sarcoma, melanoma, lung cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, astrocytoma, head cancer, neck cancer, bladder cancer, breast cancer, lung cancer, colorectal cancer, thyroid cancer, pancreatic cancer, gastric cancer, hepatocellular carcinoma, leukemia, lymphoma, Hodgkin's disease, Burkitt's disease, arthritis, rheumatoid arthritis, diabetic retinopathy, angiogenesis, restenosis, in-stent restenosis and vascular graft restenosis.

25. (Withdrawn) The pharmaceutical composition of claim 21, wherein said ribonuclease of the T2 family is RNase B1.

26. (Withdrawn) The pharmaceutical composition of claim 21, wherein said ribonuclease of the T2 family is selected from the group consisting of RNase T2, RNase Rh, RNase M, RNase Trv, RNase Irp, RNase Le2, RNase Phyb, RNase LE, RNase MC, RNase CL1, RNase Bsp1, RNase RCL2, RNase Dm, RNase Oy and RNase Tp.

27. (Withdrawn) A method of preparing a medicament useful in preventing, preventing, inhibiting and/or reversing proliferation, colonization, differentiation and/or development of abnormally proliferating cells comprising the step of combining a ribonuclease of the T2 family with a pharmaceutically acceptable carrier.

28. (Withdrawn) The method of claim 27, wherein said ribonuclease of the T2 family substantially lacks ribonucleolytic activity.

29. (Withdrawn) The method of claim 27, further comprising the step of inactivating the ribonucleolytic activity of said ribonuclease of the T2 family.

30. (Withdrawn) The method of claim 29, wherein said step of inactivating the ribonucleolytic activity of said ribonuclease of the T2 family is effected by a process selected from the group consisting of boiling, autoclaving and chemically denaturing.

31. (Withdrawn) The method of claim 27, further comprising the step of identifying the medicament as a treatment for a specified cancer.

32. (Withdrawn) The method of claim 27, further comprising the step of identifying the medicament as a treatment for a specified proliferative disorder or disease.

33. (Withdrawn) The method of claim 32, wherein the specified proliferative disorder or disease is selected from the group consisting of papilloma, blastoglioma, Kaposi's sarcoma, melanoma, lung cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, astrocytoma, head cancer, neck cancer, bladder cancer, breast cancer, lung cancer, colorectal cancer, thyroid cancer, pancreatic cancer, gastric cancer, hepatocellular carcinoma, leukemia, lymphoma, Hodgkin's disease, Burkitt's disease, arthritis, rheumatoid arthritis, diabetic retinopathy, angiogenesis, restenosis, in-stent restenosis and vascular graft restenosis.

34. (Withdrawn) The method of claim 27, wherein said ribonuclease of the T2 family is RNase B1.

35. (Withdrawn) The method of claim 27, wherein said ribonuclease of the T2 family is selected from the group consisting of RNase T2, RNase Rh, RNase M, RNase Trv, RNase Irp, RNase Le2, RNase Phyb, RNase LE, RNase MC, RNase CL1, RNase Bsp1, RNase RCL2, RNase Dm, RNase Oy and RNase Tp.

36. (Withdrawn) A method of preparing a medicament useful in preventing, inhibiting and/or reversing proliferation, colonization, differentiation and/or

development of abnormally proliferating cells comprising the step of combining a polynucleotide encoding and capable of expressing in vivo a recombinant ribonuclease of the T2 family with a pharmaceutically acceptable carrier.

37. (Withdrawn) The method of claim 36, wherein said ribonuclease of the T2 family substantially lacks ribonucleolytic activity.

38. (Withdrawn) The method of claim 36, further comprising the step of inactivating the ribonucleolytic activity of said ribonuclease of the T2 family.

39. (Withdrawn) The method of claim 38, wherein said step of inactivating the ribonucleolytic activity of said ribonuclease of the T2 family is effected by a process selected from the group consisting of boiling, autoclaving and chemically denaturing.

40. (Withdrawn) The method of claim 36, further comprising the step of identifying the medicament as a treatment for a specified cancer.

41. (Withdrawn) The method of claim 36, further comprising the step of identifying the medicament as a treatment for a specified proliferative disorder or disease.

42. (Withdrawn) The method of claim 41, wherein the specified proliferative disorder or disease is selected from the group consisting of papilloma, blastoglioma, Kaposi's sarcoma, melanoma, lung cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, astrocytoma, head cancer, neck cancer, bladder cancer, breast cancer, lung cancer, colorectal cancer, thyroid cancer, pancreatic cancer, gastric cancer, hepatocellular carcinoma, leukemia, lymphoma, Hodgkin's disease, Burkitt's disease, arthritis, rheumatoid arthritis, diabetic retinopathy, angiogenesis, restenosis, in-stent restenosis and vascular graft restenosis.

43. (Withdrawn) The method of claim 36, wherein said ribonuclease of the T2 family is RNase B1.

44. (Withdrawn) The method of claim 36, wherein said ribonuclease of the T2 family is selected from the group consisting of RNase T2, RNase Rh, RNase M, RNase Trv, RNase Irp, RNase Le2, RNase Phyb, RNase LE, RNase MC, RNase CL1, RNase Bsp1, RNase RCL2, RNase Dm, RNase Oy and RNase Tp.

45. (Currently Amended) A method of treating a tumor in a mammalian subject, the method comprising the step of administering to the subject a therapeutically effective amount of a ribonuclease of the T2 family, thereby treating the tumor in the mammalian subject.

46. (Currently Amended) A method of preventing, inhibiting ~~and/~~or reversing the development of a tumor in a mammalian subject, the method comprising the step of administering to the subject a therapeutically effective amount of a ribonuclease of the T2 family, thereby preventing, inhibiting or reversing the development of a tumor in a mammalian subject.

47. (Currently Amended) A method of preventing, inhibiting ~~and/~~or reversing transformation of a benign tumor to a malignant tumor in a mammalian subject, the method comprising the step of administering to the subject a therapeutically effective amount of a ribonuclease of the T2 family, thereby preventing, inhibiting or reversing transformation of a benign tumor to a malignant tumor in a mammalian subject.

48. (Currently Amended) A method of preventing, inhibiting ~~and/~~or reversing tumor angiogenesis in a mammalian subject, the method comprising the step of administering to the subject a therapeutically effective amount of a ribonuclease of the T2 family, thereby preventing, inhibiting or reversing tumor angiogenesis in a mammalian subject.

49. (Currently Amended) A method of reducing the number of individual tumors in a mammalian subject, the method comprising the step of administering to the subject a therapeutically effective amount of a ribonuclease of the T2 family, thereby reducing the number of individual tumors in a mammalian subject.

50. (Currently Amended) A method of reducing tumor size in a mammalian subject, the method comprising the step of administering to the subject a therapeutically effective amount of a ribonuclease of the T2 family, thereby reducing tumor size in a mammalian subject.

51. (Currently Amended) A method of reducing a number of malignant tumors in a mammalian subject, the method comprising the step of administering to the subject a therapeutically effective amount of a ribonuclease of the T2 family, thereby reducing a number of malignant tumors in a mammalian subject.

52. (Currently Amended) A method of preventing, inhibiting ~~and/~~or reversing transformation of a tissue into a tumor in a mammalian subject, the method comprising the step of administering to the subject a therapeutically effective amount of a ribonuclease of the T2 family, thereby preventing, inhibiting or reversing transformation of a tissue into a tumor in a mammalian subject.

53. (Withdrawn) A method of treating a tumor in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a polynucleotide encoding and capable of expressing in vivo a recombinant ribonuclease of the T2 family.

54. (Withdrawn) A method of preventing, inhibiting and/or reversing the development a tumor in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a polynucleotide encoding and capable of expressing in vivo a recombinant ribonuclease of the T2 family.

55. (Withdrawn) A method of preventing, inhibiting and/or reversing transformation of a benign tumor to a malignant tumor in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a polynucleotide encoding and capable of expressing in vivo a recombinant ribonuclease of the T2 family.

56. (Withdrawn) A method of preventing, inhibiting and/or reversing tumor angiogenesis in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a polynucleotide encoding and capable of expressing in vivo a recombinant ribonuclease of the T2 family.

57. (Withdrawn) A method of reducing the number of individual tumors in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a polynucleotide encoding and capable of expressing in vivo a recombinant ribonuclease of the T2 family.

58. (Withdrawn) A method of reducing tumor size in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a polynucleotide encoding and capable of expressing in vivo a recombinant ribonuclease of the T2 family.

59. (Withdrawn) A method of reducing a number of malignant tumors in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a polynucleotide encoding and capable of expressing in vivo a recombinant ribonuclease of the T2 family.

60. (Withdrawn) A method of preventing, inhibiting and/or reversing transformation of a tissue into a tumor in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of a polynucleotide encoding and capable of expressing in vivo a recombinant ribonuclease of the T2 family.

61. (New) The method of claim 1, wherein said differentiation is malignant differentiation.

62. (New) The method of claim 1, wherein said angiogenesis is tumor angiogenesis.